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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,578

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Thierry Marin-Martinod

0512-1217

5258

466 7590 03/30/2007
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EXAMINER

BELLINGER, JASON R

ART UNIT

PAPER NUMBER

3617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/500,578

Applicant(s)

MARIN-MARTINOD, THIERRY

Examiner

Jason R. Bellinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-18, 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 is indefinite due to the fact that it is unclear what element or elements is/are being referred to by the term "them" in line 4.

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 12, 14-15, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Barabino. In Figures 3-5, Barabino shows a wheel assembly 150 including a rim 152 and a tire 154, which define a closed space therebetween. The closed space includes pressurized gas (namely pressurized air). A reservoir 156 containing a pressurized gas is disposed in the annular space defined between the tire 154 and the rim 152, between the sidewalls of the tire. The reservoir 156 rotates with the rim 152. A means 164 for selectively connecting the reservoir 156 to the closed space is mounted to the rim 152.

As best understood, a control unit 166 is connected to the selective connecting means 164, capable of switching the means 164 between an open and closed state.

The control unit 166 is a pressure sensor that switches the connecting means 164 between open and closed states dependent upon the pressure within the closed space. The wheel 150 further includes means 178 for selectively venting the closed space that is connected to the control unit 166.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barabino in view of Gonzaga. Barabino does not specify that the reservoir is filled with nitrogen. Gonzaga teaches that a tire may be filled with nitrogen (see paragraph [0004]). Therefore from this teaching, it would have been obvious at the time of the invention to fill the reservoir of Barabino with nitrogen, as a substitute equivalent tire-filling gas, dependent upon availability, cost, and the type of application in which the tires would be used.
7. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barabino in view of Alonso et al. Barabino does not show a wheel assembly including a temperature sensor. Alonso et al teaches the use of a wheel assembly including an air regulation system controlled by a temperature sensor 70. Therefore from this teaching, it would have been obvious at the time of the invention to provide the control unit of

Barabino with a temperature sensor, in order to allow the control means to activate the connecting means in response to either a pressure drop or temperature change in the tire, thus providing a system that responds to more than one variable.

8. Claims 17-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barabino in view of Hamilton et al. In Figure 2, Barabino shows a remote data processor unit 140 that does not rotate with the wheel 150. A complementary wireless communications means connects the control unit 166 to the data processor unit 140 allowing transmission of measured value data therebetween (see column 5, lines 40-45).

Barabino however does not disclose the data processor unit transmitting commands to the controller, nor the presence of antennas. Hamilton et al teaches the use of a tire pressure management system that includes a data processing unit 150 that may transmit commands to a control unit 158 to allow insertion of air into a closed space formed between a tire and wheel rim. Transceivers 164 and 166 include antennas, one of which (164) rotates with the wheel, while the other (166) is remotely situated from the wheel and connected to the data processing unit. Therefore from this teaching, it would have been obvious at the time of the invention to provide the system of Barabino with a data processor capable of commanding the control unit using signals transmitted by antenna, in order to allow precise control of the amount of gas inserted into the tire during operation, as a substitute equivalent controlling means, dependent upon availability and cost.

Response to Arguments

9. Applicant's arguments filed 22 December 2006 have been fully considered but they are not persuasive. The Applicant argues that the reservoir of Barabino is not disposed between the sidewalls of the tire, as now claimed; further arguing that the reservoir cannot then act as a spare tire.

First, it should be noted that the Applicant is arguing the structure of Figure 3 of the instant invention, which is a non-elected embodiment. The Applicant elected the embodiment of Figure 1 without traverse in the reply filed 9 June 2006. The elected embodiment of Figure 1 has a reservoir 40 located within the rim.

Second, the reservoir of Barabino meets the limitations of the claims, inasmuch as elected Figure 1 of the instant invention, due to the fact that the reservoir lies within the parallel planes formed by the sidewalls of the tire.

Third, it should be noted that any further amendments including limitations drawn to non-elected embodiments of the invention will be considered non-responsive.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason R. Bellinger whose telephone number is 571-272-6680. The examiner can normally be reached on Mon - Thurs (9:00-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason R Bellinger
Primary Examiner
Art Unit 3617

